

## **REMARKS**

Applicants have studied the Office Action dated April 24, 2003 and have made amendments to the claims. No new matter has been added. It is submitted that the application, as amended, is in condition for allowance. By virtue of this amendment, claims 1-18 are pending. Claims 1-3, 6-8 and 11-13 have been amended. Reconsideration and further examination of the pending claims in view of the above amendments and the following remarks is respectfully requested. In the Office Action, the Examiner:

(1-2) Rejected claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over Gupta et al. (U.S. Patent No. 6,415,326) in view of Ravi (U.S. Patent No. 5,292,834).

The Applicants respectfully submit that the Examiner's rejection under 35 U.S.C. § 103 (a) have been overcome based on the aforementioned amendments to the claims and the following remarks.

### Overview of the Present Invention

The present invention is directed to a method and system for limiting the usage of data communications bandwidth when transferring a data item across a data link. In one aspect of the present invention, data is transmitted by receiving a request for a data item at a server and by receiving a speed indication signal at the server from the requesting computer. The <u>speed indication signal comprises an indicated speed of transmission</u>. The operation of the present invention then operates by <u>limiting an average rate of transmission</u> of at least a portion of the data item across a data link to the requesting computer to be not greater than the indicated speed, wherein the indicated speed is less than the data rate of the data link and the data rate capacity of the server.

#### Claim Amendments

Independent claims 1, 6 and 11 have been amended to more clearly identify that this aspect of the claimed invention operates by <u>limiting an average rate of transmission</u>

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of at least a portion of the data item. Support for this amendment is found, for example, in the specification at page 10, lines 1-4. No new matter has been added.

Dependent claims 2, 7, and 12 have been amended to conform their wording to the amendments of the claims from which they depend. No new matter has been added.

Dependent claims 3, 8, and 13 have been amended to more clearly identify that the first data item is received at the server and that the remote computer is not one of the server or the requesting computer. Support for this amendment is found, for example, in the specification at page 7, lines 7-15. No new matter has been added.

# Rejection under 35 U.S.C. §103(a) as being unpatentable over Gupta in view of Ravi

As noted above, the examiner rejected claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over Gupta et al. (U.S. Patent No. 6,415,326) (hereinafter Gupta) in view of Ravi (U.S. Patent No. 5,292,834) (hereinafter Ravi).¹ The Examiner recites 35 U.S.C. §103. Although the Examiner indicates that Gupta discloses the invention substantially as claimed, a determination of obviousness or non-obviousness, as expressly specified in the Statute cited by the Examiner, of the claimed subject matter requires giving full recognition to the claimed subject matter "as a whole."

To begin, the disclosure of Gupta is directed towards a streaming multimedia player that is able to change <u>video</u> or <u>audio</u> playback speeds by selecting <u>different</u> media streams <u>that are all previously stored</u> on a server. Gupta, Abstract, Column 6, lines 57-65. The focus of the Gupta disclosure is on techniques for selecting a point within the <u>different</u> media stream that corresponds to the currently displayed point of a currently viewed media stream. Gupta, column 9, lines 5-17; column 10, lines 31-39. The user of the Gupta

<sup>&</sup>lt;sup>1</sup> Applicants make no statement whether such combination is even proper BC9-99-044 -8- S/N 09/497,836

invention selects a time altered media stream, such as a multi-media segment that contains a fast forward version of a primary media stream. Gupta, column 8, lines 51-64.

The Ravi reference is directed to adjusting multimedia stream transmission rates so as to match the available capacity of ether the communications link or the available processing power of the receiving node. The transmission rate is adjusted in response to "Decrease Bandwidth" (DEC\_BW) message or a converse "Increase Bandwidth" message. The receiving node provides these increase or decrease bandwidth messages as feedback from the receiving node to the transmitting node. These bandwidth messages are based upon excesses or deficiencies in the speed of either (i) processing or (ii) communications as observed at receiving node. Ravi, Abstract, FIG. 11. The "Increase Bandwidth" or "Decrease Bandwidth" messages are not taught to include an "indicated speed," but rather they convey only an "increase" or "decrease" instruction.

By way of analogy, a data transmission rate can be analogized to a audible volume control on a television. The "decrease bandwidth" and "increase bandwidth" messages of the Ravi disclosure are similar to "Volume Up" and "Volume Down" controls commonly found on a television. In contrast, the "indicated speed of transmission" as claimed by the present invention is analogous to specifying that the volume control is to be set to a value of 25% of total audio output.

With regards to claims 1, 6 and 11, the Examiner asserts that the claimed limitation of "receiving a speed indication signal at the server from the requesting computer wherein the speed indication signal comprise an indicated speed of transmission" is taught by a passage of the Gupta reference that reads "a network client also accepts a speed designation or playback speed from a human user." Gupta, Column 6, lines 38-40. Gupta continues by explaining that "the speed designation might be a speed factor relative to the original or default playback speed of the selected multimedia stream." Gupta, Column 6, lines 40-42. The speed designation of Gupta refers to the multimedia playback speed, not to the transmission speed of data communications. Applicants respectfully assert that a

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speed indication signal that comprises an indicated speed of transmission, as is claimed for an aspect of the present invention, is not taught, suggested or made obvious by a the Gupta reference that teaches a speed designation that relates to the playback speed of a multimedia stream. Applicants respectfully assert that the Gupta reference does not teach, suggest or make obvious the limitation of "limiting an average rate of transmission ... to be not greater than the indicated speed" as is claimed for aspects of the present invention. By way of analogy, the "speed designation" or "playback speed" of the Gupta reference can be analogized to a VCR's playback speed selection of "fast forward," "normal," or "single frame" for the playback of a video selection. The "average rate of transmission" of the presently claimed invention can be analogized to the speed at which the data comprising the video selection is communicated from the server to the requesting computer.

Applicants further assert that neither the Gupta reference or the Ravi reference, taken either alone or in combination, teach, suggest or make obvious the claimed invention, taken as a whole, which includes:

limiting an average <u>rate of transmission</u> of at least a portion of the data item across a data link to the requesting computer to be not greater than <u>the indicated speed</u>, wherein the indicated speed is less than the data rate of the data link and the data rate capacity of the server.

The Examiner correctly states, in section 2, page 2, last paragraph of the Office Action, that the Gupta reference does not teach the above element. Applicants respectfully traverse the Examiner's assertion that application of the Ravi reference to the Gupta reference would teach, suggest or make obvious the claimed invention "as a whole." Neither the Gupta reference or the Ravi reference teach <u>limiting an average rate of transmission</u>.. to be not greater than an indicated speed as is claimed for the present invention. Gupta teaches selection of one of a plurality of available multimedia playback speeds and Ravi teaches transmission of a message to "increase bandwidth" or "decrease bandwidth" messages from the client to the server. The present invention provides a arge



variety and hence greater granularity than the message to increase or decrease bandwidth. In contrast to the Gupta and Ravi references, the present invention allows direct specification of the average transmission rate, by receiving a speed indication signal at the server from the requesting computer, wherein the speed indication signal comprises an indicated speed of transmission.

Moreover, the Gupta reference is directed to the selection of different data items based upon the playback speed selected by a user. No determination, processing associated with, or direct limitation of transmission rates across the data link is mentioned in the Gupta reference. The intent, purpose and function of the Gupta reference is the selection of data files or data items which contain streaming media that plays back at different speeds and the determination of the proper starting point within that file for a desired playback experience. The user of the Gupta system does not provide a "speed indication signal" that comprises "an indicated speed of transmission" and thereby explicitly "limits an average rate of transmission," as is set forth in the claims of the present invention. Applicants respectfully reassert from their earlier response that a modification of the Gupta reference to the purposes of the present invention destroys the intent, purpose and function of the Gupta invention. The Federal Circuit has consistently held that when a §103 rejection is based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, such as proposed modification is not proper and the prima facie case of obviousness can not be properly made. See In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

For at least the reasons discussed above, Applicants respectfully assert that amended claims 1, 6 and 11 distinguish over the Gupta and Ravi references, taken either alone or in combination, and that the rejection of these claims under 35 U.S.C. §103(a) should be withdrawn.

With respect to claims 3, 8, and 13, Applicants respectfully assert that the Gupta and Ravl references, including the portion of the Gupta reference cited by the Examiner,

does not teach, suggest or make obvious the claimed invention "as a whole," including the above discussed limitations with the additional limitations of:

accessing a remote computer indicated in an address included in the request, wherein the remote computer is not one of the server and the requesting computer; and

receiving, at the server, the first data item from the remote computer.

Neither the Gupta or Ravi references, taken alone or in combination with each other, teach, suggest or make obvious accessing a remote computer, wherein the remote computer is not one of the server and the requesting computer. For at least the reasons discussed above, Applicants respectfully assert that amended claims 3, 8 and 13 distinguish over the Gupta and Ravi references, taken either alone or in combination, and that the rejection of these claims under 35 U.S.C. §103(a) should be withdrawn.

With regards to claims 5, 10 and 15, applicants respectfully assert that neither the Gupta reference or the Ravi reference, taken either alone or in combination with each other, teach the claimed invention "as a whole," particularly the elements of:

generating a schedule for issuing <u>pause transmission</u> and <u>resume</u> <u>transmission signals based on the user input speed setting</u>, wherein the schedule limits a transmission rate of transmission of at least a portion of the data item across a data link to the requesting computer to be not greater than the user input speed, wherein the input speed is less than the data rate of the data link and the data rate capacity of the server;

transmitting the user request for a data item to a server computer; and sending a sequence of pause transmission and resume transmission signals from the client computer to a server computer according to the schedule.



In particular, Applicants are unable to identify in either the Gupta or Ravi references any teaching of pause transmission signals and/or resume transmission signals that are used in conjunction with a schedule that <u>limits rate of transmission</u> ... to be not greater than the user input speed. Further, neither the Gupta or Ravi references indicates generating a schedule for such transmissions. Applicants further respectfully assert that the "pause removal" type of time compression" that was referred to in the passage cited by the Examiner, in Gupta in Column 7, lines 63 through Column 8, line 5, is not related to the "pause transmission" and the "resume transmission" as is claimed for the present invention. Applicants further respectfully assert that cited references, especially the cited portions of the Gupta reference, do not even mention sending a sequence of pause transmission and resume transmission signals from the client computer to the server computer according to the schedule, as Is claimed for an aspect of the present invention.

Therefore, Applicants respectfully assert that the Gupta and Ravi references, taken either alone or in combination with each other, fail to teach, suggest or make obvious the claimed invention "as a whole," as is claimed by claims 5, 10 and 15. For at least the reasons discussed above, Applicants respectfully assert that claims 5, 10 and 15 distinguish over the Gupta and Ravi references, taken either alone or in combination, and that the rejection of these claims under 35 U.S.C. §103(a) should be withdrawn.

In further regard to the rejection of claims 2, 7, and 12, the Examiner further took official notice that:

it is well known that when streaming data, the data is provided in blocks wherein the <u>size of the blocks</u> and the <u>period in which the blocks</u> of data <u>would be streamed</u> are <u>determined based upon the indicated or determined speed</u>.

Office Action, Page 5, Section 2 (Emphasis Added).

Applicants note that the Examiner has supplied three (3) references as support for this official notice. Applicants reassert their traversal of the assertion of this official notice.



Applicants further note that the MPEP cites that <u>a</u> reference should be cited.<sup>2</sup> Applicants have reviewed the cited references and note that they indicate that data is divided into blocks for transmission, but Applicants respectfully assert that these references do not indicate that the <u>size</u> of the blocks, or that the <u>period</u> at which blocks are transmitted, is <u>determined based upon the indicated or determined speed</u>. Applicants acknowledge that once one of the block size and the transmission period is selected, the other quantity is determined by the data transmission rate. However, the presently claimed invention "as a whole" requires that "limiting an average rate of transmission" comprise:

<u>determining a block size based</u> at least <u>on the average transmission</u> rate;

determining a period based at least on the average transmission rate;

transmitting a plurality of blocks of data, each of the blocks having the block size and being transmitted at intervals substantially equal to the time period.

Applicants respectfully assert that the cited references do not support all of the elements of the officially noted facts. As noted by the examiner, Gupta does not teach the above listed elements. Applicants respectfully assert that neither the Gupta reference or the Ravi reference, either taken alone or in combination with each other, teach, suggest or make obvious the invention "as a whole" as is claimed by claims 2, 7, and 12. For at least the reasons discussed above, Applicants respectfully assert that amended claims 2, 7 and 12 distinguish over the Gupta and Ravi references, taken either alone or in combination, and that the rejection of these claims under 35 U.S.C. §103(a) should be withdrawn.

<sup>&</sup>lt;sup>2</sup> See. MPEP §2144.03, "If the applicant traverses such an assertion the examiner should cite a reference in support of his or her position."



As discussed above, independent claims 1, 5, 6, 10, 12 and 13 distinguish over the Gupta and Ravi references. Furthermore, dependent claims 2-4, 16; 7-9, 17 and 12-15, 18 depend from claims 1, 6 and 11, respectively, and contain all of the limitations of those claims. Therefore, dependent claims 2-4, 16; 7-9, 17 and 12-15, 18 distinguish over the Gupta and Ravi references for at least the same reasons, and therefore the rejection of these claims under 35 U.S.C. §103(a) should also be withdrawn.





## **CONCLUSIONS**

In view of the foregoing, it is respectfully submitted that the application and the claims are in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

PLEASE, if for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call either of the undersigned attorneys at (561) 989-9811 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

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